

METHOD AND APPARATUS FOR FREQUENCY ESTIMATION USING ITERATIVE
FILTERING IN A GSM COMMUNICATIONS SYSTEM

ABSTRACT OF THE DISCLOSURE

[c17] A method of frequency estimation for a GSM communications system is disclosed. First, the a frequency control channel data burst is received and downsampled into a plurality of subsets. Then, the subsets are filtered using an auto-regressive filter. The filtered subsets are then correlated and summed to determine a parameter r. The estimated frequency is calculated based upon the parameter r.